

REMARKS/ARGUMENTS

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claims 1-9 and 21-29 are pending in this case. Claims 1 and 5 are amended, Claims 9-20 are canceled without prejudice or disclaimer, and new Claims 21-29 are added by the present amendment. As amended Claims 1 and 5 and new Claims 21-29 are supported by the original disclosure,¹ no new matter is added.

In the outstanding Official Action, Claim 5 was objected to; Claim 1 was rejected under 35 U.S.C. §102(b) as anticipated by Parker (U.S. Patent No. 6,314,659); Claim 2 was rejected under 35 U.S.C. §103(a) as unpatentable over Parker in view of Rooney et al. (U.S. Patent No. 4,741,868, hereinafter "Rooney"); and Claims 3-8 were rejected under 35 U.S.C. §103(a) as unpatentable over Parker in view of Thal (U.S. Patent No. 2,087,788).

Applicants and Applicants' representatives thank Examiner Gravini for the courtesy of the interview granted to Applicants' representatives on January 17, 2007. During the interview, differences between the claims and Parker were discussed. Examiner Gravini agreed that a proposed amendment to Claim 1 places Claim 1 in better condition for allowance.

With regard to the objection to Claim 5, Claim 5 is amended to depend from Claim 4. Accordingly, the objection to Claim 4 is believed to be overcome.

With regard to the rejection of Claim 1 under 35 U.S.C. §102(b) as anticipated by Parker, that rejection is respectfully traversed.

Amended Claim 1 recites:

***two liquid drying drums in a chamber located
adjacent one another to form a liquid concentration section
therebetween, said liquid concentration section configured to***

¹See, e.g., the specification at page 9, line 11 to page 12, line 2.

maintain liquid fed into said liquid concentration section in contact with both of the two liquid drying drums;
a liquid feed port configured to feed a liquid into the liquid concentration section; and
a liquid splash and scatter preventing equipment having a **cooling** function provided in a location **above** a portion of the liquid concentration section.

The outstanding Office Action cited nip rolls 11 of Parker as “drums” as recited in original Claim 1. However, Figure 1 of Parker clearly shows that nip rolls 11 of Parker are separated from each other, and thus do not form any liquid concentration section, much less a “liquid concentration section configured to maintain liquid fed into said liquid concentration section in contact with **both** of the two liquid drying drums” as recited in amended Claim 1. Accordingly, nip rolls 11 of Parker cannot be “drums” as defined in amended Claim 1.

Further, as Parker does not teach “a liquid concentration section” as defined in Claim 1, Parker cannot teach “a liquid splash and scatter preventing equipment ... provided in a location **above a portion of the liquid concentration section**” as defined in Claim 1 either. As Parker does not teach each and every element of Claim 1, Claim 1 is not anticipated by Parker and is patentable thereover.

With regard to the rejection of Claim 2 as unpatentable over Parker in view of Rooney, it is noted that Claim 2 is dependent from Claim 1, and thus is believed to be patentable for at least the reasons discussed above. Further, it is respectfully submitted that Rooney does not cure any of the above-noted deficiencies of Parker. Specifically, double drum dryer 96 of Rooney does not form a “liquid concentration section configured to maintain liquid fed into said liquid concentration section in contact with **both** of the two liquid drying drums” as recited in amended Claim 1. Accordingly, Rooney does not teach or suggest “two liquid drying drums” as defined in amended Claim 1.

Further, the condenser 176 mentioned in column 5 of Rooney is **not** located in the double drum dryer 96 of Rooney.² Thus, Rooney does not teach or suggest “a liquid splash and scatter preventing equipment having a cooling function provided in a location ***above a portion of a liquid concentration section between drums.***” Accordingly, it is respectfully submitted that Claim 2 is patentable over Parker in view of Rooney.

With regard to the rejection of Claims 3 and 8 as unpatentable over Parker in view of Thal, it is noted that Claim 3 is dependent from Claim 1, and thus is believed to be patentable for at least the reasons discussed above. Further, it is respectfully submitted that Thal does not cure the above-noted deficiencies of Parker. Specifically, double drum dryer B of Thal does not include “a liquid splash and scatter preventing equipment” as defined in amended Claim 1. The only element shown above the drums of double drum dryer B of Thal is the inlet opening 22.³ Further, the heating steam connection 36 and condensate outlet 37⁴ cited in the outstanding Office action (a) are **not** located above the drums 24 and 25 of Thal but instead are ***inside*** the drums, and (b) ***heat*** the drums.⁵ Thus, Thal does not teach or suggest “a liquid splash and scatter preventing equipment ***having a cooling function*** provided in a location ***above*** a portion of a liquid concentration section between drums.” Accordingly, it is respectfully submitted that Claim 3 (and Claim 8 dependent therefrom) is patentable over Parker in view of Thal.

With regard to the rejection of Claims 4-7, as unpatentable over Parker in view of Thal, it is noted that Claims 4-7 are dependent from Claim 1, and thus is believed to be patentable for at least the reasons discussed above. Further, it is respectfully submitted that Claims 4-7 recite subject matter that further defines over Parker and Thal.

²See Figure 2 of Rooney.

³See Figure 1 of Thal.

⁴See Thal, right column of page 2, lines 10-42 and the left column of page 4, lines 59-75.

⁵See Figure 2 of Thal.

Claim 4 recites “the cooling water maintains a surface temperature of the hollow metal passage at 13 °C to 40 °C.” Claims 5-7 also recite specific temperature ranges for the surface of the hollow metal passage. The outstanding Office Action conceded that neither Parker nor Thal teach or suggest such a feature, but concluded that such a feature would be “an obvious matter of design choice.”⁶ However, it is respectfully noted that *In re Antonie* holds that a particular parameter must first be recognized as a result-effective variable, i.e., a variable which achieves a recognized result, before the determination of the optimum or workable ranges of said variable might be characterized as routine experimentation. *In re Antonie*, 559 F.2d 618, 195 USPQ 6 (CCPA 1977). See also MPEP §2144.05(II)(B). As none of the cited references identify a surface temperature of a hollow metal passage as recited in Claims 4-7 as a result effective variable, the subject matter of Claims 4-7 **cannot** be considered a matter of routine experimentation or design choice. Accordingly, it is respectfully submitted that Claims 4-7 is patentable over the cited references.

New Claims 21-25 are supported at least by original Claims 1 and 3-8, and thus are believed to be drawn to the same invention recited in Claim 1. New Claim 21 recites “a cooling water feed system configured to supply cooling water to the hollow metal passage such that the cooling water maintains a surface temperature of the hollow metal passage at 13 °C to 40 °C.” As noted above with respect to Claim 4-7, none of the cited references identify a surface temperature of a hollow metal passage as a result effective variable. Therefore, the subject matter of Claim 21 (and Claims 22-25 dependent therefrom) **cannot** be considered a matter of routine experimentation or design choice. Accordingly, it is respectfully submitted that new Claims 21-25 are patentable over the cited references.

New Claims 26-29 are supported at least by original Claims 1 and 3-8, and thus are believed to be drawn to the same invention recited in Claim 1. New Claim 26 recites “a

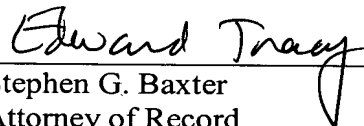
⁶See the outstanding Office Action at page 6, lines 1-7.

cooling water feed system configured to supply cooling water to the hollow metal passage such that the cooling water maintains a surface temperature of the hollow metal passage at no more than 5 °C lower than an evaporation temperature of a liquid to be dried." As noted above, none of the cited references identify a surface temperature of a hollow metal passage as a result effective variable. Accordingly, new Claim 26 (and Claims 27-29 dependent therefrom) is patentable over the cited art for at least the reasons described above with respect to new Claim 21.

Accordingly, the outstanding rejections are traversed and the pending claims are believed to be in condition for formal allowance. An early and favorable action to that effect is, therefore, respectfully requested.

Respectfully submitted,

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